



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/111,803	07/08/1998	HIDEO FUKUCHI	JAO-40854	6225	
25944 75	590 07/02/2003				
OLIFF & BERRIDGE, PLC			EXAMINER		
P.O. BOX 1992 ALEXANDRIA			CHUNG, I	DANIEL J	
			ART UNIT	PAPER NUMBER	
			2672	21	
		DATE MAILED: 07/02/2003		54	

Please find below and/or attached an Office communication concerning this application or proceeding.

 \sim

Office Action Summary Examiner Dark Chung										
### Examiner ### Daniel J Chung	<u> </u>		Application	n No.		Applicant(s)		1		
Daniel J Chung	Office Action Summary		09/111,80	3)	71		
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extractions of time may be available under the provision of 3 of PR1 136(a). In ne event, however, may a reply be timely fixed after 6X (b) MONTH(s) from the realing date of fine communication. It is not been supply available under the provision of 3 of PR1 136(a). In ne event, however, may a reply be timely fixed after 6X (b) MONTH(s) from the realing date of fine communication. The provision of the provision of the communication of the provision of the provision of the communication of the provision of the provi			Examiner			Art Unit		•		
Period for Reply				_				_		
THE MAILING DATE OF THIS COMMUNICATION. Extensions or time mybe swindble under the provided or 15 CPR 1 195(a). In no event, however, may a reply be timely filled where tax (b) MCMPTes from the mailing date of the commonication of the comm			on appears on the	cover s	heet with the c	orrespondence ac	daress			
This action is FINAL. 2b This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-3 and 5-33 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are ellowed. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on 03 March 2003 is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.	THE MA - Extension after SIX - If the pe - If NO pe - Failure I - Any repl earned p	ALING DATE OF THIS COMMUNICATIONS of time may be available under the provisions of 37 (6) MONTHS from the mailing date of this communication for reply specified above is less than thirty (30) daroind for reply is specified above, the maximum statutor or reply within the set or extended period for reply will, I y received by the Office later than three months after the	FION. CFR 1.136(a). In no evention. ys, a reply within the statumy period will apply and with a polyment apply and with a polyment apply and within a polyment apply.	ent, howeve story minim Il expire SIX ication to b	r, may a reply be timum of thirty (30) days ((6) MONTHS from ecome ABANDONE	nely filed s will be considered time the mailing date of this of D (35 U.S.C. § 133).	ily. communication.			
3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-3 and 5-33 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on 03 March 2003 is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some *c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s)	1)⊠ ⊟	Responsive to communication(s) filed	on <u>03 March 2003</u>	and 18	April 2003 .					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-3 and 5-33 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-3.5-33 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on 03 March 2003 is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121. Attachment(s)	2a)⊠	This action is FINAL . 2b)	This action is	non-fina	al.					
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☒ The proposed drawing correction filed on is/are: a) □ accepted or b) □ objected to by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) □ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) ☒ None of: 1. ☒ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received. 15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 1) ☒ Notice of Informal Patent Application (PTO-152)	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.									
5) □ Claim(s) is/are allowed. 6) ☑ Claim(s) is/are objected to. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☑ The proposed drawing correction filed on _03 March 2003 is: a) ☑ approved b) □ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) □ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) ☑ None of: 1. ☑ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received. 15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) □ Notice of Paftsperson's Patent Drawing Review (PTO-948) 5) □ Notice of Informal Patent Application (PTO-152)	4)⊠ C	laim(s) 1-3 and 5-33 is/are pending in	the application.							
6) Claim(s) 1-3.5-33 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on 03 March 2003 is: a) □ approved b) □ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received. 15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) □ Notice of References Cited (PTO-892) 2) □ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5 □ Notice of Informal Patent Application (PTO-152)	48	a) Of the above claim(s) is/are v	vithdrawn from co	nsiderat	ion.					
7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☒ The proposed drawing correction filed on 03 March 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) ☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☒ None of: 1. ☒ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s)	5) 🗌 C	claim(s) is/are allowed.								
8	6)⊠ C	laim(s) <u>1-3,5-33</u> is/are rejected.								
Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☒ The proposed drawing correction filed on 03 March 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) ☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some *c) ☒ None of: 1. ☒ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) 5) ☐ Notice of Informal Patent Application (PTO-152)	7)□ 0	7) Claim(s) is/are objected to.								
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on 03 March 2003 is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Informal Patent Application (PTO-152)	8) <u></u> C	claim(s) are subject to restriction	n and/or election r	equirem	ent.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☑ The proposed drawing correction filed on <u>03 March 2003</u> is: a) ☑ approved b) ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) ☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☑ None of: 1. ☑ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) ☑ Notice of References Cited (PTO-982) 4) ☐ Interview Summary (PTO-413) Paper No(s) 5) ☐ Notice of Informal Patent Application (PTO-152)		-								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on 03 March 2003 is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)	1	•								
11) ☐ The proposed drawing correction filed on 03 March 2003 is: a) ☐ approved b) ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) ☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No. ☐ 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)	10)∏ Ti									
If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some color None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)	_	• •								
12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	11)⊠ TI	•				J disapproved by	ine Examiner			
Priority under 35 U.S.C. §§ 119 and 120 13) △ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) △ All b) △ Some * c) △ None of: 1. △ Certified copies of the priority documents have been received. 2. △ Certified copies of the priority documents have been received in Application No. △	. — _			mice acti	on.					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) ☑ None of: 1. ☑ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received. 15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) □ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) □ Notice of Informal Patent Application (PTO-152)	· -		the Examiner.		•					
a) ☐ All b) ☐ Some * c) ☒ None of: 1. ☒ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)	1									
1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)	1		r foreign priority u	nder 35	U.S.C. § 119(a	a)-(d) or (f).				
2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)										
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)	·									
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 1 Interview Summary (PTO-413) Paper No(s). Notice of Informal Patent Application (PTO-152)	1	_ , , , , , , , , , , , , , , , , , , ,								
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)		application from the Internati	onal Bureau (PCT	Rule 1	7.2(a)).		al Stage			
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)	14) 🗌 Ad	knowledgment is made of a claim for	domestic priority ι	ınder 35	U.S.C. § 119	(e) (to a provision	al applicatio	n).		
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152)	a)	☐ The translation of the foreign langu	age provisional a	pplicatio	n has been re	ceived.				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152)		_								
	1) Notice	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTC		5) 🔲	Notice of Information					

Art Unit: 2672

DETAILED ACTION

Claims 1-3 and 5-33 are presented for examination. Claim 4 has been canceled by the amendment filed on 3-3-2003. This office action is in response to the amendment filed on 3-3-2003 and supplemental amendment filed on 4-18-2003.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on January 28, 1997. It is noted, however, that applicant has not filed a certified copy of the Priority application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al (4,246,578) and Ying et al (4,057,849), and in view of Rossmann (6,147,670), and further in view of Matthews et al (5,677,708)

Regarding claim 1, Kawasaki et al discloses that the claimed feature of an information display apparatus (See Abstract, col 1 line 4-col 2 line 26) comprising: a

Art Unit: 2672

display unit that displays information: (See Abstract, col 1 line 4-col 2 line 26) display control means for controlling a display operation of said display unit: (See Abstract, col 1 line 4-col 2 line 26) and an operating unit that designates a display operation of said display unit, said display control means causing a new line of characters to be started wherever it would otherwise be required to break the work across two lines of a plurality of lines of characters of said information, and displaying the plurality of lines of characters of said information on said display unit in a font having a width that varies according to the type of character displayed, and said display control means controlling the display operation of said display unit so that a spacing between the characters is constant. (See Fig 2, col 2 line 64-col 3 line 32); display control means causing display unit to automatically form a vertical scrolling display a plurality of times continuously when an amount of information to be displayed exceeds a number of lines displayable on display unit in one frame, the scrolling display incrementally displaying one or more rows of dots sufficient to display the font; and means for informing to a user when information to be displayed exceeds the number of lines displayable on display unit in one frame.

Kawasaki et al does not explicitly disclose that a display control means that causes a new line of characters to be started wherever it would otherwise be required to break the word across two lines of characters of information. However, Ying et al discloses the claimed feature of invention. (See col 2 line 16-37) The motivation would have been to avoid the confusion created by breaking a word in two separate lines in

Art Unit: 2672

improved display system. Therefore, it would have been obvious to one skilled in the art to incorporate the teaching of Ying et al into the teaching of Kawasaki et al.

Kawasaki et al does not specifically disclose that "automatically forming a vertical scrolling display, the scrolling display incrementally displaying one or more rows of dots sufficient to display the font." However, such limitation is shown in the teaching of Rossmann. (See Fig 1A-1D, Fig 3A-3D, Fig 5A-B, col 1 line 31-61, col 2 line 13-19)

The motivation would have been to provide the convenient way to see next unrevealed information for user. Also, the function of automatic scrolling will advantageously save the time and cost by eliminating the step of user's operations such as moving the mouse and pressing the button, as it will allow the user to see next unrevealed information without any delay. Therefore, it would have been obvious to one skilled in the art to incorporate "the automatic vertical scrolling display" of the teaching in Rossmann into the teaching of Kawasaki et al, as such improvement is also advantageously desirable in the teaching of Kawasaki et al for displaying the contents with faster time.

Also, the combination of Kawasaki, Ying and Rossmann do not explicitly discloses that "means for informing to a user when information to be displayed exceeds the number of lines displayable on display unit in one frame". However, such limitation is shown in the teaching of Matthews ["arrow tab"; 162,164,195-198] (See Abstract, Fig 5- Fig 11, col 3 line 60-col 4 line 17, col 14 line 41-col 15 line 4) It would have been

Art Unit: 2672

obvious to one skilled in the art to include "arrow tab" of Matthews into the teaching of Kawasaki, in order to effectively "provide the user with an instinctive indication that additional items exist beyond those displayed in the control object" (See col 4 line 60-63 in Matthews), as such improvement is also advantageously desirable in the teaching of Kawasaki et al for displaying maximum display contents within limited display area with optimized manner. Furthermore, implementing a scroll bar, when display content exceed the size limitation of display unit, is well known in the art. As to the on-line dictionary, scroll bar is defined as "in some graphical user interfaces, a vertical or horizontal bar at the side or bottom of a display area that can be used with a mouse for moving around in that area". Therefore, it would have been obvious to one skilled in the art to automatically show a "scroll bar" whenever the size of content information is larger than the size of display device.

Regarding claim 2, refer to the discussion for the claim 1 hereinabove, Kawasaki et al discloses that display control means causing a new line of characters to be started whenever it would otherwise be required to break a word across two of said lines of characters. (See Abstract, Fig 2, col 1 line 4-col 2 line 26, col 2 line 64-col 3 line 32)

Regarding claim 3, refer to the discussion for the claim 1 hereinabove, Kawasaki et al discloses that the claimed feature of an information display apparatus, comprising:

Page 6

A display unit that displays information (See Abstract, Fig 2, col 1 line 4-col 2 line 26, col 2 line 64-col 3 line 32)

Display control means for controlling a display operation of said display unit (See Abstract, Fig 2, col 1 line 4-col 2 line 26, col 2 line 64-col 3 line 32)

An operating unit that designates a display operation of said display unit, said display control means causing said display unit to form a fixed display when an amount of information to be displayed is not greater than a number of lines displayable on said display unit in one frame (See Abstract, Fig 2, col 1 line 4-col 2 line 26, col 2 line 64-col 3 line 32)

display control means causing said display unit to automatically form a vertical scrolling display when an amount of information to be displayed exceeds a number of lines displayable on said display unit in one frame, the operation of automatically forming a scrolling display a plurality of times continuously being provided by virtue of automatic operation of the display control means and operating unit without manual operation of a user, the scrolling display incrementally displaying one or more rows of dots sufficient to display a font; and (See Abstract, Fig 2, col 1 line 4-col 2 line 26, col 2 line 64-col 3 line 32)

means for informing to a user when information to be displayed exceeds the number of lines displayable on display unit in one frame.

Art Unit: 2672

Regarding claim 5, refer to the discussion for claim 4 hereinabove, Rossmann discloses that display control means changing a scroll speed for forming the scrolling display in accordance with an operation performed on said operating unit. (See Abstract, Fig 1A-1D, Fig 3A-3D, Fig 5A-B, col 2 line 13-19)

Regarding claim 6, refer to the discussion for claim 4 hereinabove, Rossmann discloses that display control means changing the scroll speed in accordance with an operation externally performed on said operating unit, the operation providing an instruction to change a predetermined scroll speed determined at the start of the scrolling display. (See Abstract, Fig 1-7, col 1 line 10-40, col 3 line 31-39)

Regarding claim 7, refer to the discussion for claim 4 hereinabove, Rossmann discloses that display control means presetting the scroll speed determined at the start of the scrolling display by operation of a switch button on said operating unit. (See Abstract, Fig 1-7, col 1 line 10-40, col 3 line 31-39)

Regarding claim 8, refer to the discussion for claim 4 hereinabove, Rossmann discloses that display control means causing said display unit to form [a demonstration display] at a currently set scroll speed, the scroll speed being determined at the start of the scrolling display by said operating unit. (See Abstract, Fig 1-7, col 1 line 10-40, col 3 line 31-39)

Art Unit: 2672

Rossmann does not explicitly disclose that "demonstration display at a currently set scroll speed." However, it would have been obvious to one having ordinary skill in the art at the time of Applicant 's invention, because using a demonstration display will advantageously allow the user to set the scrolling speed with easy manner.

Regarding claim 9, claim 9 is equivalent to claim 3 and thus the rejection to claim 3 hereinabove is also applicable to claim 9.

Regarding claim 10, Kawasaki et al discloses that display control means causing said display unit to display information formed of a group of characters vertically or horizontally over a plurality of lines. (See Abstract, Fig 1, Fig 2, col 2 line 64-col 3 line 32)

Regarding claims 11-14, claims 11-14 are respectively equivalent to claims 5-8, and thus the rejections to claims 5-8 hereinabove are also respectively applicable to claims 11-14, but applied in view of the rejections to base claim 9.

Regarding claims 15, Kawasaki et al discloses that a communication circuit that receives information, the information received via said communication circuit being displayed on said display unit in response to said display control means. (See Fig 2, col 2 line 64-col 3 line 32)

Art Unit: 2672

Regarding claim 16, claim 16 is equivalent to claim 15, and thus the rejection to claim 15 hereinabove is also applicable to claim 16, but applied in view of the rejection to base claim 9.

Regarding claims 17 and 18, claims 17 and 18 are equivalent to claim 3, and thus the rejection to claim 3 hereinabove is also applicable to claims 17 and 18, but applied in view of the rejection to base claims 15 and 16.

Regarding claim 19, refer to the discussion for claim 1 hereinabove, Kawasaki et al discloses that an antenna unit for receiving a signal via said communication circuit.

(See Fig 2, col 2 line 64-col 3 line 32)

Kawasaki et al does not explicitly disclose that "an antenna unit." However, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention, because an antenna unit is necessarily required for receiving a signal in communication system.

Regarding claim 20, claim 20 is equivalent to claim 19, and thus the rejection to claim 19 hereinabove is also applicable to claim 20, but applied in view of the rejection to base claim 16.

Art Unit: 2672

Regarding claim 21, refer to the discussion for claim 1 hereinabove, Kawasaki et al discloses that communication circuit receiving an individually selective calling signal or a message via said antenna unit. (See Fig 2, col 2 line 64-col 3 line 32)

Regarding claim 22, claim 22 is equivalent to claim 21, and thus the rejection to claim 21 hereinabove is also applicable to claim 22, but applied in view of the rejection to base claim 20.

Regarding claim 23, Kawasaki et al discloses that display control means comprising at least one of a processing unit and a storage device. (See Fig 3, Fig 11, col 1 line 39-47)

Regarding claim 24, Kawasaki et al discloses that processing unit comprising at least one of a switching monitor section and a message determining section. (See Fig 3, Fig 11)

Regarding claim 25, Kawasaki et al discloses that storage device storing a plurality of fonts. (See Fig 3, Fig 11, col 1 line 39-47)

Regarding claims 26-28, claims 26-28 are respectively equivalent to claims 23-25, and thus the rejections to claims 23-25 hereinabove are also respectively applicable to claims 26-28, but applied in view of the rejections to base claim 3.

Art Unit: 2672

Regarding claims 29-32, claims 29-32 are similar in scope to the claims 1 and 3, and thus the rejections to claims 1 and 3 hereinabove are also applicable to claim 29-32.

Regarding claim 33, Kawasaki et al discloses that display control means displaying the plurality of lines of characters of said information on said display unit in a font having a width that varies according to the type of character displayed, and said display control means controlling the display operation of said display unit so that a spacing between the character is constant. (See Fig 2, col 2 line 64-col 3 line 32)

Response to Arguments/Amendments

Applicant's arguments with respect to claims 1-3 and 5-33 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment ["means for informing to a user"] necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2672

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Art Unit: 2672

Page 13

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc

June 8, 2003

JEFFER: EFFE